AMENDMENTS TO SPECIFICATION

Please replace the paragraph beginning at line 17 of page 1 with the following amended paragraph:

In a 3D multi-user interactive system, as shown in FIG. 3, the interactions among the users 31 in the virtual scene 32 are transmitted through a network 33. Therefore, interactive messages of the users in the virtual scene 32 must be quickly transmitted and processed. If the transmission of interactive messages cannot be quickly processed due to the delay of the network 33, the picture at the user end becomes unstable, resulting in low usability of the 3D multi-user interactive system.

Please replace the paragraph beginning at line 24 of page 1 with the following amended paragraph:

When more ~~people is~~ users 31 are connected to the line at the same time in the same virtual world, the efficiency of the system becomes degraded because lots of messages must be processed. Furthermore, because the Internet is of a highly delayed and low bandwidth environment, there is a limit to real time requirement in a 3D multi-user system. In order to achieve acceptable real time interactive requirement, certain schemes, such as dead reckoning and timer, are used to reduce network bandwidth demand in a multi-user virtual environment.

Please replace the paragraph beginning at line 7 of page 2 with the following amended paragraph:

The timer scheme is to use a timer to count a predetermined time value, so as to transmit a message 34 for informing all ~~participants~~ participated users 31 to update their states when the time is up and there is a significant difference in the state of the virtual environment. The dead reckoning scheme is to estimate the position of the ~~participant~~ participated user 31 that has not received the interactive message by an algorithm, and to transmit the position ~~information~~

message 34 only when the difference between the estimated value and the value of the real position of the ~~participant~~ participated user 31 in the scene is larger than a threshold value, so as to reduce the numberr of network packets to be transmitted.

Please replace the paragraph beginning at line 17 of page 2 with the following amended paragraph:

However, when more and more users are ~~people is~~ connected to the 3D multi-user interactive system at the same time, the quantity of network packets to be received and processed by the computer at the user end is greatly increased. As a result, the aforesaid schemes cannot satisfy the practical requirements. Therefore, it is desirable to provide an improved method to mitigate and/or obviate the aforementioned problems.

Please replace the paragraph beginning at line 2 of page 4 with the following amended paragraph:

The method of rapidly determining the transmission time and range of a position message under an Internet virtual reality environment in accordance with the present invention is based on an AOI ~~AIO~~ (Area Of interest) concept to determine the AOI area by dividing virtual scene in a square division or an interlaced square division manner. As illustrated in FIG. 1, a virtual scene 11 is divided into a plurality of blocks numbered from 1 through 25 by means of square division, in which the user is assumed to be at the block numbered 12, which is referred as an user block. The user block (numbered 12) and its neighboring blocks (numbered 6, 7, 8, 11, 13, 16, 17 and 18) are defined as the user's low interactive AOI area.

Please add the following new paragraph after line 25, page 3:

FIG. 3 schematically illustrates a 3D multi-user interactive system.